

AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double-bracketed text indicating deletions.

LISTING OF CLAIMS

1. (PREVIOUSLY PRESENTED) A field-effect transistor, comprising:

a ferromagnetic layer, having a film thickness of 50 nm or less, which is made of a Ba-Mn oxide showing ferromagnetism at 0°C or higher;

a dielectric layer made of a dielectric material or a ferroelectric material, said ferromagnetic layer and said dielectric layer being bonded to each other, wherein the field-effect transistor has a bottom-gate structure.

2. (ORIGINAL) The field-effect transistor as set forth in claim 1, wherein the ferromagnetic layer is made of a Ba-Mn oxide whose composition is represented by $(La_{1-x}Ba_x)MnO_3$ where x satisfies $0.05 < x < 0.3$.

3. (ORIGINAL) The field-effect transistor as set forth in claim 1, wherein the ferromagnetic layer is made of a Ba-Mn oxide whose composition is represented by $(La_{1-x}Ba_x)MnO_3$ where x satisfies $0.10 < x < 0.3$.

4. (CURRENTLY AMENDED) The field-effect transistor as set forth in claim 1, wherein the dielectric material or the ferroelectric material is BaTiO_3 , SrTiO_3 , $(\text{Ba}_{1-y}\text{Sr}_y)\text{TiO}_3$, PbTiO_3 , ~~$\text{Pb}(\text{Zr}_{1-z}\text{Ti}_z)\text{TiO}_3$~~ $\text{Pb}(\text{Zr}_{1-z}\text{Ti}_z)\text{O}_3$, or Al_2O_3 , where y satisfies $0 < y < 1$ and z satisfies $0 < z < 1$.

5. (PREVIOUSLY PRESENTED) The field-effect transistor as set forth in claim 1, wherein the dielectric material or the ferroelectric material is BaTiO_3 , SrTiO_3 , $(\text{Ba}_{1-y}\text{Sr}_y)\text{TiO}_3$, PbTiO_3 , or Al_2O_3 , where y satisfies $0 < y < 1$.

6. (CANCELLED)

7. (CURRENTLY AMENDED) The field-effect transistor as set forth in claim 2, wherein the dielectric material or the ferroelectric material is BaTiO_3 , SrTiO_3 , $(\text{Ba}_{1-y}\text{Sr}_y)\text{TiO}_3$, PbTiO_3 , ~~$\text{Pb}(\text{Zr}_{1-z}\text{Ti}_z)\text{TiO}_3$~~ $\text{Pb}(\text{Zr}_{1-z}\text{Ti}_z)\text{O}_3$, or Al_2O_3 , where y satisfies $0 < y < 1$ and z satisfies $0 < z < 1$.

8. (PREVIOUSLY PRESENTED) The field-effect transistor as set forth in claim 2, wherein the dielectric material or the ferroelectric material is BaTiO_3 , SrTiO_3 , $(\text{Ba}_{1-y}\text{Sr}_y)\text{TiO}_3$, PbTiO_3 , or Al_2O_3 , where y satisfies $0 < y < 1$.

9. (CURRENTLY AMENDED) The field-effect transistor as set forth in claim 3, wherein the dielectric material or the ferroelectric material is BaTiO_3 , SrTiO_3 , $(\text{Ba}_{1-y}\text{Sr}_y)\text{TiO}_3$, PbTiO_3 ,

~~Pb~~ ~~(Zr_{1-z}Ti_z)~~ TiO₃ Pb(Zr_{1-z}Ti_z)O₃, or Al₂O₃, where y satisfies 0<y<1 and z satisfies 0<z<1.

10. (PREVIOUSLY PRESENTED) The field-effect transistor as set forth in claim 3, wherein the dielectric material or the ferroelectric material is BaTiO₃, SrTiO₃, (Ba_{1-y}Sr_y)TiO₃, PbTiO₃, or Al₂O₃, where y satisfies 0<y<1.